1. A system for determining a level of a substance, the system comprising:

a first conductive element conveying a first electromagnetic signal in proximity to a plurality of substances;

a coupler positioned at a dielectric mismatch boundary between the substances, the coupler causing a change in a capacitance of the first conductive element upon the first electromagnetic signal traversing a part of the first conductive element substantially adjacent to the coupler;

a second conductive element conveying a second electromagnetic signal based on the first electromagnetic signal and being coupled thereto by the change in capacitance of the first conductive element caused by the coupler; and

a processor executing instructions to determine a level of at least one of the substances based at least in part on a time delay between the first and second electromagnetic signals.

2. The system of claim 1 wherein the first and second conductive elements are positioned substantially parallel to each other and substantially perpendicular to the dielectric mismatch boundary.

3. The system of claim 1 wherein the first electromagnetic signal exhibits an ultra-wideband frequency.

4. The system of claim 1 wherein the dielectric mismatch boundary corresponds to a transitional region between a gaseous substance and a liquid substance.

5. The system of claim 1 wherein the dielectric mismatch boundary corresponds to a transitional region between at least two of a vacuum, a gaseous substance, a liquid substance, a semi-solid substance, and a solid substance.

6. The system of claim 1 further comprising a transmitter for forming the first electromagnetic signal.

7. The system of claim 1 further comprising a receiver for detecting the time delay between the first and second electromagnetic signals.

8. The system of claim 7 wherein the receiver includes an equivalent time sampling circuit.

9. The system of claim 1 wherein the first and second conductive elements form a parallel conductor transmission line structure.

10. The system of claim 1 wherein the first and second conductive elements are flexible.

11. The system of claim 1 wherein the first and second conductive elements exhibit quadrilateral cross-sections.

12. The system of claim 1 wherein the first and second conductive elements exhibit substantially identical cross-sections.

13. The system of claim 1 wherein an amplitude of the second electromagnetic signal is substantially independent of dielectric properties associated with the substances forming the dielectric mismatch boundary.

14. The system of claim 1 wherein the coupler exhibits a length corresponding to at least one-quarter of a propagation velocity pulse length of the first electromagnetic signal.

15. The system of claim 1 further comprising:

a float for positioning the coupler at the dielectric mismatch boundary.

16. The system of claim 15 wherein the float includes a buoyant component and a weighted component.

17. The system of claim 1 wherein the level corresponds to a volume of fluid in an above-ground storage tank.

18. The system of claim 1 wherein the level corresponds to a volume of fluid in a below-ground storage tank.

19. The system of claim 1 wherein the processor communicates the substance level to a digital data processing device during a communication session.

20. A method of determining a level of a substance, the method comprising:

transmitting a first electromagnetic signal on a first conductive element, the first conductive element being in proximity to a plurality of substances;

providing a coupler positioned at a dielectric mismatch boundary between the substances, the coupler causing a change in a capacitance of the first conductive element upon the first electromagnetic signal traversing a part of the first conductive element substantially adjacent to the coupler;

receiving a second electromagnetic signal based on the first electromagnetic signal at a second conductive element and in response the change in capacitance of the first conductive element caused by the coupler; and

determining a level of at least one of the substances based at least in part on a time delay between the first and second electromagnetic signals.

21. The method of claim 20 wherein the first and second conductive elements are flexible.

22. The method of claim 20 wherein the first and second conductive elements are positioned substantially parallel to each other and substantially perpendicular to the dielectric mismatch boundary.

23. The method of claim 20 wherein an amplitude of the second electromagnetic signal is independent of dielectric properties associated with the substances forming the dielectric mismatch boundary.

24. The method of claim 20 further comprising:

providing a float for positioning the coupler relative to the dielectric mismatch boundary.